

Professional and Managerial Branch
Water Utilities Group
Science Series

EPWU - PRETREATMENT ENGINEER

09/93

Summary

Under direction, manage and participate in the survey, inspection and enforcement of the industrial wastewater pretreatment program.

Typical Duties

Plan, monitor and perform technical work of the Industrial Pretreatment Program. Involves: ensuring program, policies and procedures comply with Environmental Protection Agency (EPA) and Texas Water Commission (TWC) standards and regulations; identifying industrial users subject to pretreatment regulation; scheduling industrial wastewater sampling and inspection workloads; reviewing inspection reports and classifying establishments by industry in accordance with EPA and TWC requirements; reviewing walk-through inspection reports and evaluating for further processing; performing environmental and technical research regarding water and wastewater pollutants; selecting and updating laboratory sampling and analysis procedures; determining equipment condition and preparing specifications for equipment purchases.

Enforce pretreatment program compliance. Involves: preparing industrial surcharges on a monthly basis by interpreting sample test results, performing calculations in accordance with applicable federal, state, city and utility code, regulation, rules and compliance history; notifying company of violation, penalty, corrective action requirement and appeal procedure; conducting hearings to settle enforcement disputes and negotiating compliance schedules with industries; notifying the accounting and data processing sections to collect surcharge; preparing documents in support of civil litigation or criminal prosecution and working closely with utility counsel and city prosecutor; preparing and issuing annual significant noncompliance notice to industries and submitting legal notice for publications.

Administer permits. Involves: preparing and issuing industrial discharge permits and negotiating permit disputes with the industry; supervising the issue of invoices and receipts and the processing of payments for discharge permits; issuing septic hauler permits and bills and resolving disputes.

Perform interagency and public relations work. Involves: preparing and submitting periodic and supplemental EPA pretreatment and TWC reports; preparing for and participating in EPA and TWC audits; maintaining current regulatory information and working relationships with EPA And TWC; meeting with, educating, advising and notifying industry on pretreatment requirements, regulations, methods and equipment; answering questions and requests from the public, industry, or other public agencies; maintaining contact and information exchange with departmental laboratory chemists; providing technical assistance to the City of Juarez, Mexico regarding industrial wastewater pretreatment, as assigned.

Perform supervision and section management. Involves: directing, assigning, training and evaluating designated personnel; enforcing established rules and regulations, standards of conduct and safety; preparing the section annual budget and performing other duties as required.

Minimum Qualifications

Training and Experience: Bachelor's Degree in Civil, Environmental or Chemical Engineering, or a closely related engineering discipline and six years of professional engineering experience including at least three years of professional experience in industrial pretreatment and/or in environmental wastewater programs with the EPA or a state water or wastewater regulatory agency and one year of project management experience or an equivalent combination of training and experience.

Knowledge, Skills and Abilities: Comprehensive knowledge of the principles, regulation and practices of wastewater and industrial pretreatment science and engineering. Considerable knowledge in pretreatment management, wastewater treatment processes and laboratory testing. Good knowledge of modern managerial practice and of mathematical, statistical, and engineering analysis technique. Some knowledge of business law and local water utility rules and regulations.

Ability to: identify and analyze pretreatment systems; issue written violation notices; negotiate disputes with industry; analyze and evaluate laboratory data; interpret written documents including construction plans, specifications, laboratory analysis reports and the federal register; express oneself clearly and concisely both orally and in writing; develop, prepare and submit environmental, technical and legal reports and maintain records; communicate and establish good working relationships with industry, regulatory agencies, other city departments and the general public; give public presentations; conduct business by telephone; work on multi-jurisdictional and multi-national wastewater pretreatment

projects; formulate and achieve program objectives; supervise subordinates and delegate work; develop and maintain work schedules for section.

Skill in: calculating surcharges and fines to the appropriate industry; computer software applications including, spreadsheet, data base and wordprocessing programs; laboratory technique and chemical analysis.

Physical Requirements: Mobility in field environment; operation of a motor vehicle through city traffic; contact with sewer wastewater, move sampling equipment; must access confined areas with self contained breathing apparatus; exposure to all weather conditions.

Licenses and Certificates: Registration as a Professional Engineer in the State of Texas. Texas Class "C" Driver's License.

Director of Personnel

Department Head

OFFICIAL